

Freshwater Fisheries Monthly Report – April 2021

Stock Assessment

Deep Creek Lake Northern Pike - Completed the northern pike mark and recapture study on Deep Creek Lake. Thirty five pike ranging from 17.91 - 41.77 inches (455 –1,061 mm) were collected during two nights of electrofishing for a combined catch-per-unit-effort (CPUE) of 7.72 pike/hour. Data will be further analyzed in efforts to follow trends and gain life history information of the lake's northern pike population.

Walleye Tournament - Staff was onsite for data collection at the Garrett Bassers walleye tournament held on Deep Creek Lake. A total of 34 boats participated in the event bringing in 92 fish. All walleye brought in by anglers were weighed and measured. Otoliths were removed from some walleye for length at age data, which will help to characterize Deep Creek Lake's walleye population.

Habitat and Water Quality

Environmental Review - Provided aquatic resource information for the following environmental review projects:

- An application submitted by Maryland Department of Transportation, State Highway Administration (MDOT SHA) was reviewed for a ditch cleaning project along MD Route 42. The review covered 19 individual sites where disturbance would occur from the project; general best management practices were requested with particular emphasis at 12 sites pertaining to strict sediment and erosion control to protect coldwater resources.
- A time of year restriction waiver was requested by MDOT SHA for the removal of diversion structures at a bridge that spans the Youghiogheny River on MD 39. After reviewing the application and with no equipment needed in stream, Freshwater Fisheries had no objections with the proposed project.
- Provided comments on three Project Open Space properties. Properties included; Camp Baker (Aaron Strauss Wilderness Area), Myers property (South Mountain), and the Georges Creek Rail Trail.
- Reviewed and commented on a time of year waiver request on Minebank Run highway work (Baltimore County).
- Reviewed and commented on an emergency repair of a bridge at Herring Run (Baltimore County).
- Reviewed and commented on a time of year waiver request on Whitemarsh Run highway work (Baltimore County).
- Commented on a very complicated review of a time of year waiver request on Little Gunpowder River at Rt. 40 with anadromous fish concerns versus public safety (Baltimore County).
- Reviewed and commented on an emergency culvert repair on an unnamed tributary to Deer Creek (Harford County).
- Reviewed and commented on an emergency culvert repair on an unnamed tributary to Broad Creek (Harford County).

- Provided comments to project review for housing development plans on Deep Run (Carroll County).
- Provided comments on a department internal review of a bridge inspection at Patapsco Valley State Park.
- Provided comment to Maryland Department of the Environment (MDE) about areas in southern Maryland identified by MDE as areas where per-and polyfluoroalkyl substances (PFAS) are more likely to occur in fish. This exercise was necessary for MDE to concentrate on water bodies where anglers are likely to catch and consume fish. With this information, MDE plans to collect fish tissue from species likely targeted for consumption and have the tissue tested for contaminant levels. This information will be added to the fish consumption advisory that MDE provides to the public.

Owl Branch - Visited a wetland mitigation site on Owl Branch and provided comments to protect the brook trout resource (Baltimore County).

Jennings Randolph Habitat Enhancement - With staff assistance from the U.S. Army Corps of Engineers (USACE) and Maryland Conservation Corps, Freshwater Fisheries staff completed the habitat enhancement project on Jennings Randolph Lake. Fifty-three trees were placed in the lake at predetermined locations to increase habitat for aquatic species. It is hoped this work will enhance the angling experience. Staff will be working with USACE in the coming months to deploy more fish structures in Jennings Randolph Lake.



(Photo provide by Francesca Gullion USACE)

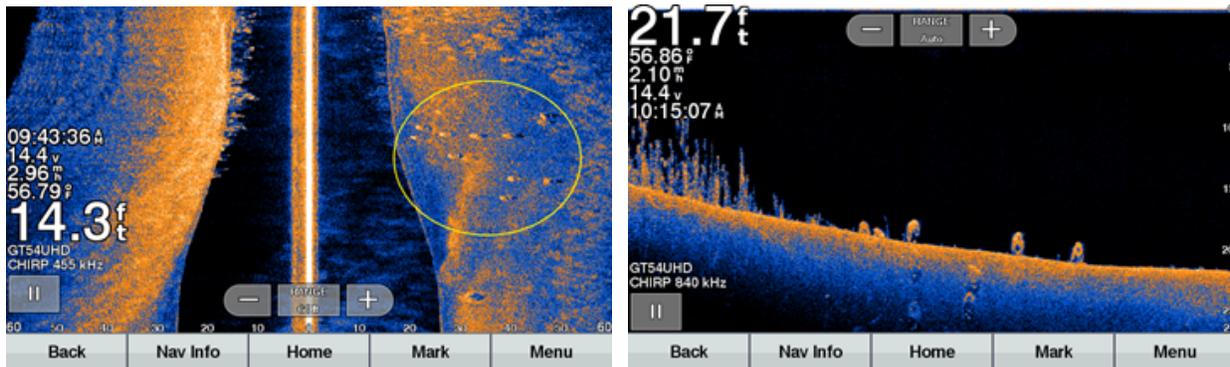
State Lake Protection and Restoration Fund Habitat Projects:

Reef Ball Habitat - Deployed 50 concrete reef balls at Blairs Valley Lake in Washington County and 50 reef balls at Hunting Creek Lake in Cunningham Falls State Park in Frederick County. The reef balls were set at each lake to add additional structure/habitat for fish. Many thanks to Eastern Region for coordinating the project and staff with Wildlife and Heritage Service, Hydrographic Operations, and Cunningham Falls State Parks for providing assistance and equipment.



Left to right: Placing reef balls; reef balls on the bottom of Hunting Creek Lake.

Post Reef Ball Evaluation - Completed a post-deployment scanning of reef balls that were placed in Lake Habeeb last fall. With the use of a Garmin ECHOMAP Chartplotter/ Fish Finder unit, staff was able to locate the structures and capture images of them on the lake bottom. Images will be used in reporting on the project as funding for the reef ball structures and Garmin ECHOMAP unit were provided from the Maryland State Lakes Protection and Restoration Fund.



Images of reef ball on lake bottom. Photos provided by Western Region 1 staff

Stocking and Population Management

Put-and-Take Trout - Western and Central region staff coordinated with hatchery personnel to assist with the stocking of rainbow/golden trout and brown trout into streams for the spring trout angling season.

Juvenile Trout – Approximately 22,000 rainbow trout at 53/pound (source - Albert Powell Hatchery) were stocked in the Youghiogheny River catch-and-return area.

Smallmouth Bass - Smallmouth bass were collected from the upper Potomac River for use as hatchery broodfish. Two bass tournaments were held on the river to help collect fish. Thanks to all the tournament anglers who participated. Staff also collected fish using boat electrofishing below Dam 4. A total of 56 adults were transported to production ponds at the department's Joseph Manning Hatchery. Spawning should occur over the next few weeks. Juvenile smallmouth bass produced at the hatchery will be stocked back in the upper Potomac River.



Smallmouth bass collected during tournament for use in supplemental stocking project

Smallmouth Bass - Collected adult smallmouth bass from Triadelphia Reservoir (Howard and Montgomery counties), a central Maryland reservoir owned and operated by the Washington Suburban Sanitary Commission (WSSC). The fish were stocked into an on-site pond to spawn, where the juveniles will be raised to the fingerling stage and later released into the reservoir. In previous years, this method of propagation was successful in supporting the smallmouth bass fishery in Triadelphia Reservoir.

Largemouth Bass - Collected adult largemouth bass from Potomac River (Charles County) to serve as hatchery brood at Manning Hatchery (Charles County). The fish were stocked into hatchery ponds, where they will spawn. Adults will be returned to the Potomac River after spawning, and the juveniles they produce will be stocked into suitable habitat in the Potomac River as fingerlings or advanced-fingerlings, in support of augmenting natural reproduction and maintaining that fishery.

Striped Bass - Attempted to collect a small number of striped bass adults from an oligohaline section of the Patuxent River (Charles County). The fish will serve as brood for Manning Hatchery (Charles County) and will be returned to the river after spawning occurs. Few adults were observed and additional effort will be necessary to collect those fish.

Stocking Permits – There were 23 applications submitted for the approval of stocking waters in the state of Maryland. Each application was reviewed for location, to confirm only species that are approved to be stocked in Maryland waters were listed, and to ensure the supplier of the fish is on the 2021 approved out of state suppliers list.

Outreach

Provided customer service information for inquiries regarding:

- Tips for fishing Deep Creek Lake.
- Anglers catching an abundance of sublegal walleye on Deep Creek Lake.
- Tournament information on Deep Creek Lake.
- Brook trout fishing in Garrett County.
- Fishing equipment regulations within different management areas.

- Advice on keeping anglers off school property while school is in session. Spoke with security officers from an elementary school in western Maryland who advised that anglers were frequently crossing school property causing a safety concern for children.
- Purchasing a state park pass.
- Spring trout season, trout allocation, changes to trout stocking due to COVID-19 restrictions, and restrictions for trout stocking volunteers.

Angler Preference Survey - Western Region I staff conducted angler interviews on the North Branch Potomac River as part of a new angler preference survey. Information from this survey will be compiled to provide data on angling pressure, user groups, economic value of the river, and to provide data for possible future management decisions pertaining to the river.

Scientific Collection Permits - Two scientific collection permits were submitted to collect benthic macroinvertebrates from two locations on the South Fork of Sand Run and one location on the North Fork of Sand Run. Recommendations were given on disinfecting between sampling locations.

American Fisheries Society virtual meeting - Gave virtual presentations at the 2021 Southern Division of the American Fisheries Society virtual meeting. Two talks were given during the Managing Coldwater Designated Use symposium. The presentations titled “Development of Maryland Coldwater Resources Mapping Tool” and “Evaluating the Thermal Impacts of Small Ponds in Maryland Trout Watersheds” gave overviews of recent coldwater conservation projects.

Envirothon - Materials were provided to the Hickory Environmental Education Center for the Garrett County Envirothon training days. Materials for fish identification, fish anatomy, and benthic macroinvertebrates were all provided.

New State Record - Positively identified and certified a new state record fallfish weighing 2.14 pounds caught by a 13-year-old boy in Broad Creek (Harford County).

Invasive Species

Blue Catfish Tracking - Continued tracking blue catfish in the oligo- and mesohaline Patuxent River (Anne Arundel, Charles, Prince George’s counties) as part of the cooperative project with the United States Geological Survey (USGS) Leetown Science Center (West Virginia) and other partners. During April 2021, at least 22 of the 38 fish tagged during November 2020 were detected via active or passive tracking by biologists. Generally, fish are concentrated near Jug Bay, as they have been throughout winter.

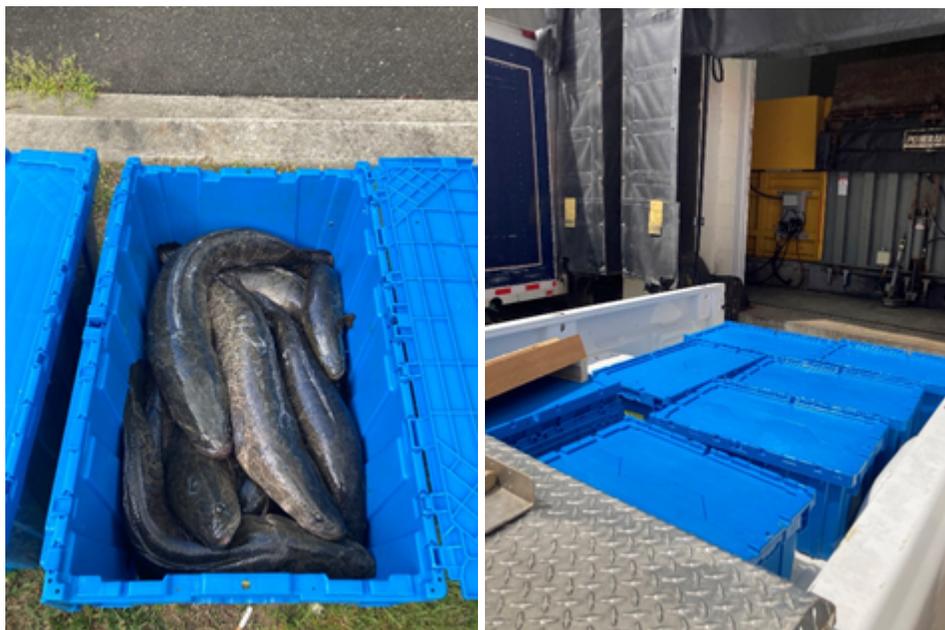
Blue Catfish Tagging - Began tagging an additional 42 blue catfish in support of the cooperative project with USGS and other partners, that aims to identify overwintering and spawning areas of blue catfish within Patuxent River (Anne Arundel, Charles, Prince George’s counties). Movements of those fish, with the 38 fish tagged during fall 2020, will be monitored throughout spring 2021. Department biologists were assisted by Maryland Biological Stream Survey (MBSS) staff during tagging as part of the memorandum of understanding between the divisions.

Conowingo Dam Invasive Fish Beneficial Use Project - The Conowingo Dam west fish lift went operational and lift staff are now removing any invasive fish species they encounter. Eastern Region staff have been communicating with the lift staff, and [finding beneficial uses](#) for the invasive fish captured. The main uses thus far have been for scientific research and human

consumption. The flathead catfish are being utilized for a watershed-wide study being completed by the Pennsylvania Fish and Boat Commission and Penn State University. Some northern snakeheads have been utilized to help populate a bay-wide snakehead database by getting total length, weight, sex and stomach content. The first of many loads of northern snakeheads were taken to J.J. McDonnell, a cooperating seafood processor. As of April 22, over 800 pounds of snakeheads have been processed and donated to the Maryland Food Bank and the United Way.



Lift workers sorting fish



Snakeheads headed for processing

Signage - A new snakehead sign has been developed to illustrate rules related to possession; the sign will be translated to Spanish, printed, and displayed at Gunpowder State Park. It will also be uploaded along with other signs and outreach for aquatic invasive species on the [department's website](#).

Funding Request - Prepared a pre-proposal to request \$98,500 in federal funds from the U.S. Fish and Wildlife Service to support aquatic invasive species prevention and control efforts in 2022 and 2023.

Podcast - Participated in a podcast to discuss northern snakehead impacts and harvest initiatives on snakeheadlife.com podcast with Caz Kenny.

Brook Trout Program

Continued to conduct creel surveys on the North Branch of the Potomac River tailwater trout fishery.

Participated in the annual spring Southern Division of the American Fisheries Society Trout Committee meeting. This group is composed of the coldwater/trout biologists from Maryland to Georgia. Topics discussed covered the spectrum of trout management issues including stocking, angler use, habitat restoration, trout genetics, brook trout reintroductions, etc.

Assisted Regional Operations with sampling of walleyes caught and harvested on Deep Creek Lake. Otoliths were removed from male and female fish of various size classes in order to determine growth rates. Also assisted with the northern pike survey on Deep Creek Lake.

Tidal Bass Program

The [Black Bass Advisory Committee](#) met to discuss catch-photo-release tournaments, fish health, and new ideas that change some non-tidal bass fishing regulations. A summary of motions and actions will be available online in early May and minutes are being prepared.

Shot some film footage of live well operation by Capt. Steve Chaconas to support a short video that updates recommendations on live well maintenance. The updated video content was suggested by the Black Bass Advisory Committee and should be available as part of the department's [Bass Class series](#) by fall 2021.

Completed tagging of adult largemouth bass from the tidal Potomac River (Charles and Prince George's counties) as part of cooperative effort between the department, Virginia Department of Wildlife Resources, and District of Columbia's Department of Energy and Environment. The project aims to better estimate the abundance of largemouth bass in the Potomac River. Anglers are encouraged to report tagged fish to basstag@dwr.virginia.gov or the department's [Volunteer Angler Survey](#).

Other

Completed training concerning a new permit required for the discharge of certain biological and chemical pesticides that persist in waters of the state. The permit must be filed with MDE before application of pesticides to aquatic ecosystems and will be required for algal and aquatic vegetation control in areas treated by staff.